

REMARKS

Claims 1, 3, 4, 9-14, 16, 19, 21, 24, 25, 27, 29, 31-32, 34, 37-39, 43, 44, 46-48, 50, 52, 54, 56-58, 61, 62, 64, 66-67, 70-72, 75, 93-95, 97, 99, 101, 169, 171, 174-176, 179, 181, 183, 185, 187, 189, 194-196, 199-200, 202, 209, 211, 213, 215-216, 218-219, 221-222, 225, 227-228, 230-231, 234, 236-237, 239-240, 242-243, 245-249 and 251 have been amendeded to further clarify the claims. Claims 2, 8, 15, 23, 40-42, 45, 49, 60, 68, 98, 177, 192, 193 and 203-207 have been cancelled. Upon entry of this amendment, claims 1, 3-7, 9-14, 16-22, 24-39, 43, 44, 46-48, 50-59, 61-67, 69-76, 93-97, 99-101, 169-176, 178-191, 194-202 and 208-251 will be pending in this application.

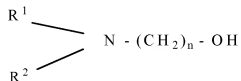
A. Telephone Interview Summary

The undersigned thanks the Examiner for the courteous telephone interview conducted on September 14, 2006. During the interview, the Examiner expressed his opinion that the rejection for lack of enablement under 35 U.S.C. § 112, first paragraph may be overcome by incorporation of a generic formula representing a class of primary alcohols that can be utilized in the practice of the present invention. Regarding the definiteness rejections, the Examiner suggested amending claims 15, 16, 23, 60, 98, and 99 to include the term "has" as opposed to "comprises" and agreed to further consider the rejection of the term "substituted hydrocarbyl" as used in claims 15, 23, 25, 60, 62, and 98 and the term "about" as used in claims 2-4, 7-8, 11, 19, 32, 34, 35-40, 49, 51, 54, 67-68, 93, 169, 171-176, 190, 196, 216, 219, 222, 225, 228, 231, 234, 237, 240, 243, 246 and 249. The undersigned advised the Examiner that he would consider the Examiner's suggestions prior to responding to the pending Office action.

B. Rejection under 35 U.S.C. § 112

1. Enablement

Claims 1-22, 30-59, 67-76, 93-97, 99-101, and 169-251 are rejected under 35 U.S.C. § 112, for lack of enablement. Applicants traverse the finding of the Office for the reasons previously presented. However, in view of the Office's suggestion that the rejection for lack of enablement may be overcome by incorporation of a generic formula representing a class of primary alcohols that can be utilized in the practice of the present invention, claim 1 has been amended to expedite allowance of the claims. In particular, claim 1 has been amended to incorporate the requirement of now cancelled claim 23, namely, that the primary alcohol correspond to the formula:



wherein n is an integer ranging from 2 to 20; and R¹ and R² are independently hydrogen, hydrocarbyl, or substituted hydrocarbyl. As such, applicants have enabled one skilled in the art to practice the invention as claimed without undue experimentation and the rejection of claim 1 should be withdrawn.

Furthermore, in view of the fact that claims 2-22, 30-59, 67-76, 93-97, 99-101, and 169-251, were rejected under 35 U.S.C. § 112, first paragraph on the same basis as claim 1 and since each of these claims depend either directly or indirectly from amended claim 1, applicants respectfully request withdrawal of the rejection for lack of enablement as to all pending claims.

Applicants expressly reserve the right to pursue claim 1 as originally filed in a subsequent continuation application.

2. Definiteness

Claims 2-76, 93-101, and 169-251 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. For the reasons discussed in more detail below, claims 2-76 and 93-101 as well as 169-251, as amended, are definite and satisfy the requirements of 35 U.S.C. § 112. Therefore applicants request withdrawal of the rejection.

The test to determine if a claim is definite is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986) and MPEP § 2173.02. A claim may not be rejected solely because of the type of language used to define the subject matter for which a patent is sought. *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), MPEP § 2173.01.

Claims 2-4, 7-8, 11, 19, 32, 34, 35-40, 49, 51, 54, 67-68, 93, 169, 171-176, 190, 196, 216, 219, 222, 225, 228, 231, 234, 237, 240, 243, 246 and 249 have been rejected as indefinite for reciting the phrase "at least about" because "the specification does not point out what is meant by the phrase." The Office goes on to state that the mere recitation of those terms, in particular the term "about" is invalid as indicated in the MPEP. In doing so, the Office mischaracterizes the MPEP and the specific case law upon which it is based.

The MPEP clearly states:

"When a term of degree is present, determine whether a standard is disclosed **or whether one of ordinary skill**

in the art would be apprised of the scope of the claim" (MPEP § 2173.05(b), emphasis added)

The Office looked to the specification, but ignores whether one of ordinary skill in the art would be apprised of the scope of the claim. In view of the fact that persons skilled in the art can readily assess whether the claimed invention is infringed by established measurement techniques, the inclusion of the phrase "at least about" and more particularly the term "about" as used in the present claims does not render the claims indefinite.

The Office appears to have misapplied the holding of *Amgen Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991). In *Amgen*, the Court found the phrase "at least about" indefinite where there was close prior art. The Court in *Amgen* at least partially relied on the fact that the claimed range could not be precisely measured and exhibited a wide range of error and that the applicant had used the claimed range to distinguish the prior art. The Court did not rule that the use of the phrase "at least about" in a claim renders the claim invalid *per se*, but rather that the phrase was indefinite when considered in the context of close prior art where there was a wide range of measurement error.

As discussed below in connection with the rejection under 35 U.S.C. § 103(a), the Office has not cited any close prior art, as in *Amgen*, nor that variability in measurement techniques are such that infringement cannot be adequately assessed. In the present application, all numerical ranges can clearly be assessed through methods known to those in the art and, as such, are definite. *W.L. Gore & Associates, Inc. V. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). Therefore, the

mere inclusion of the phrase "at least about" does not render the claims indefinite as alleged and the rejection should be withdrawn.

Applicant further points out that a quick search of the USPTO data base to determine whether the phrase "at least about" appears in claims already issued by the Office revealed that the phrase appears in the claims of well over **62,000 issued patents.**

Claims 15, 16, 23, 60, 98 and 99 were rejected as indefinite based on the recitation of the phrase "said primary alcohol comprises" or the phrase "said carboxylic acid salt comprises." Claims 15, 23, 60 and 98 have been cancelled in view of the fact that the requirements of those claims have been incorporated into claim 1 by this amendment. Claim 16 and 99 have been amended to replace the term "comprises" as it appears in the phrases objected to by the Office with the term "is". As such, the rejection of claims 15, 16, 23, 60, 98 and 99 has been obviated and should be withdrawn.

Claims 15, 23, 25, 60, 62 and 98 have been rejected as indefinite for recitation of the phrase "substituted hydrocarbyl." The Office asserts that the phrase is indefinite "because the claim does not specify what the hydrocarbyl is substituted with." However, as discussed in the specification, the claimed invention includes hydrocarbyls wherein at least **one hydrogen atom has been substituted with an atom other than hydrogen or a group of atoms containing at least one atom other than hydrogen.** The specification goes on to list examples wherein the hydrogen atom may be substituted with a halogen atom, such as a chlorine or fluorine atom. The hydrogen atom alternatively may be substituted with an oxygen atom or a group containing an oxygen atom to form, for example, a hydroxy group, an ether, an ester, an anhydride, an aldehyde, a ketone, or a

carboxylic acid. The hydrogen atom also may be replaced with a group containing a nitrogen atom to form, for example, an amide or a nitro group. In addition, the hydrogen atom may be substituted with a group containing a sulfur atom to form, for example, $-SO_3H$ (See, for example, page 11, lines 19-28 of the specification (emphasis added)). Simply stated, the term "substituted hydrocarbyl" includes any substituted hydrocarbyl and is not limited to a narrow set of substituted hydrocarbyls or any single one.

To the extent the Office is suggesting that the phrase is too broad in scope since it includes all substituted hydrocarbyls, applicants remind the Office that according to MPEP 2173.04, breadth of a claim is not to be equated with indefiniteness. If the scope of the subject matter is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. §112, second paragraph. In this case, the scope of the subject matter is clear and has been expressly stated in the specification. Applicants have made no indication that the scope is different than that defined in the claims and as such the claims comply with 35 U.S.C. §112, second paragraph.

C. Rejection under 35 U.S.C. § 103(a)

Reconsideration is requested of the rejection of claims 1, 15-18, 23-31, 46-49, 60-66, 74-76, 93 and 98-101, under 35 U.S.C. § 103(a), as being obvious over Goto et al. (U.S. Pat. No. 4,782,183) in view of Franczyk (U.S. Pat. No. 5,292,936).

Claim 1, as amended includes requirements of cancelled claim 8, that the supporting structure has a yield strength of at least about 100 Mpa and comprises at least about 10% by weight non-copper metal. None of the cited references describe or suggest any process for dehydrogenating a primary alcohol using a dehydrogenation catalyst that comprises at least about 10% by weight non-copper metal. Franz et al., describe using a catalyst having only trace amounts of non-copper metals, i.e., 1% or less non-copper metals. Goto et al., describe using a catalyst containing copper in combination with a zirconium compound. None of the zirconium compounds described therein could be fairly described as a non-copper metal. The Office found claim 8 non-obvious over the cited art. In view of the fact that these requirements have been incorporated into claim 1, the rejection of claim 1 under 35 U.S.C. § 103(a) has been obviated and should be withdrawn.

CONCLUSION

Favorable reconsideration and allowance of all pending claims are respectfully solicited. The Examiner is invited to contact the undersigned attorney should any issues remain unresolved.

The Commissioner is authorized to charge the fee for a three-month extension of time up to and including November 2, 2006 and any other fees in connection with this amendment to Deposit Account No. 19-1345.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard A. Schuth". The signature is stylized with a large, looping initial "R" and a cursive "Schuth".

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